

ANNUAL INDEX

VOLUME 15 1984

KEY

First number is issue; second number is page.

(86)109 Issue 86, Page 109

Issue 85 = February, 1984

Issue 86 = April, 1984

Issue 87 = June, 1984

Issue 88 = September, 1984

Issue 89 = October, 1984

Issue 90 = December, 1984

PROFESSIONAL COURSES

COBOL Programming, Part 2—Procedure Division, Milton H. Aronson and Larry M. Berger (85)92

COBOL Programming, Part 3—Sample Program, Data Types, Milton H. Aronson and Larry M. Berger (86)60

COBOL Programming, Part 4—Arithmetic, Milton H. Aronson (87)94

COBOL Programming, Part 5—Report-Type Pic Codes, Relational and Logical Operations, Branching and Conditioning Test, Milton H. Aronson (88)69

COBOL Programming, Part 6—Analysis of Typical Programs, Milton Aronson (89)78

COBOL Programming, Part 7—Comparison of COBOL, BASIC, FORTRAN and PASCAL, Milton H. Aronson (90)104

Computer Principles & Practice—A Course for Healthcare Professionals, Part 1—Binary Concepts and Codes, Milton H. Aronson (89)69

Computers—Principles and Practice, Part 2—Arithmetic and Logic, The Two Functions of a Computer, Milton H. Aronson (90)110

Electrophoresis, Part 1—Tsieh Sun, M.D., North Shore University Hospital (85)85

Electrophoresis, Part 2—Separation of Protein Fractions, Tsieh Sun, M.D., North Shore University Hospital (86)54

Electrophoresis, Part 3—Immunoelectrophoresis and Immunodiffusion Techniques, Tsieh Sun, M.D., North Shore University Hospital (87)86

Electrophoresis, Part 4—Lipoprotein Electrophoresis, Tsieh Sun, North Shore University Hospital (89)86

ARTICLES

Advances in Dual-Chamber Pacing, Sensing and Telemetry, Ross Baker, Steve Adler and Richard D. Sanders, Intermedics (88)76

Automated Clinical Laboratory Equipment for Neonatal and Pediatric Use, Thomas S. Kankoski, Eastman Kodak Co. (90)76

Biofeedback: State-of-the-Art—Problems and Possibilities, Dr. John A. Corson, Dartmouth Medical School, and Harold K. Myers, Royal Victoria Hospital (89)93

Blood-Pressure Data Acquisition, Computer and A/D Converter Provide Rapid Blood-Pressure Data, Andrew Davis, Data Translation (87)126

Blood Pressure Measurement—Sensitivity Error Associated With The Use of Disposable Diaphragm Domes in Direct Blood Pressure Measurements, Allen Devoid, Bio-Tek Instruments, Inc. (86)74

Brain Imaging With QAR & PET, Beverly J. Jafek, Gould/DeAnza Imaging (85)114

Cardiac Measurement, Ingela Schnittger, Elaine P. Gordon, Peter J. Fitzgerald and Richard L. Popp, Stanford University School of Medicine (87)102

Cardionet—The Local Area Network for the Cardiology Department, James Pritchett, Trinity Computing (87)118

Computer Anxiety? Melinda Hayes, Datamax Computer Corp. (87)136

Computer Facilities Pharmaceutical Testing, Nancy Morsch Stokesberry, Brownstone Associates (88)116

Computer Program for Cognitive Rehabilitation, Jacqueline Smith, William Beaumont Hospital (90)94

Computer Software—Database Can Select the Right Drug, for the Right Patient, at the Right Time, John F. Aforismo, R.P., PharmaMex®, Div of Automatic Business Products Co., Inc. (88)119

Computer Use in a Surgery Center, John P. Barret Jr., M.D., Florida Center for Knee Surgery (88)123

Computerized Spirometer, John R. Boehringer, Boehringer Laboratories (85)200

Computers As Nutritional Consultants, Dr. Vincent P. Marran, N-Squared Computing (89)126

Computers in the ICU, Reed M. Gardner, University of Utah (87)129

DRG and Lab Costs, Peter J. Dygert, Eastman Kodak (88)100

Deducting Bad Debts Before They Happen, Robert Feinschreiber, Attorney (85)132

Digital Oscilloscopes, Amelia Tegen, Oscilloscope Div., Nicolet Instrument Corp. (85)127

Digital Radiography, William B. Seaman, Columbia University (86)156

Downtime: What is the Real Cost?—Richard Barclay Ph.D., Deaconess Hospital and Joseph O'Keefe, Transector Systems (87)99

Dual-Channel Confusion, Richard A. deRosa, Diagnostic Medical Instruments (88)92

Electrosurgery and Patient Monitoring, Karl Hausner, ELMED Inc. (85)110

Electrosurgery With REM, Roger C. Odell, Valleylab (85)107

GFCI—Ground Fault Circuit Interrupter, Raymond Legatti and Raymond Wood, Technology Research Corp. (90)79

Group Practice Computer: OMEGA—On-Line Medical Executor for Group Automation, John Nelson, Eagle Computer, Inc. (90)80

1984 ANNUAL INDEX Continued

Hemodynamic Trend Plotter, John Koszuta, Boeheim Products (86)158

Hospital Information System, Christine Arnold, Management Science America, Inc. (89)124

Hospital Power Problems—Tennessee Hospital Diagnoses Power Line Fluctuations, Cures CAT Scanner Computer Ills With Voltage Regulator, Gary Mager, Sola Electric (90)97

Image Intensifier Photography, Frank de Bruin, Oldelft Corp. of America (86)78

Local Area Network for the ICU, Susan Cardwell, Hewlett-Packard (87)114

Local Area Networks, Mark Stieglitz, Western Digital (90)89

Medical Instrument Reliability—Designing Reliable Microprocessors Based Monitoring Instruments, Robin D. Becker and Ronald J. Flower, Catalyst Research (89)103

Medical Uses of High-Tensile-Strength Platinum Alloy Wire, James Cohn, Sigmund Cohn Corp. (88)96

Microcomputers in the Laboratory, Wynne Keller, Downeast Digital (87)137

Motion Analysis, J. Craig Smith, Oxford Medilog, Inc. (87)110

Nuclear Instrumentation, Staff of Beckman Instruments (85)123

Nutrition Analysis Programs, Anita K. Wilson, University of Wisconsin-Stout (88)132

Pharmacy Computer System, Bruce Dickerhofe, Copley Memorial Hospital (89)120

Power Supplies—Voltage Regulator or Dedicated Line, David Kemp, Sola Electric (89)98

Pumps in Medical Instruments, Michael R. Meivers, ASF Company (87)106

Reflections on the University/Industry Partnership, Dr. Michael Anbar, State University of New York (88)106

Rehabilitation Engineering for the Blind, Dr. John Brabyn, Smith-Kettlewell Institute of Visual Sciences (88)102

Rehabilitative Robotics, Larry Leifer, Stanford University (88)85

Robotic Device for Feeding Quadriplegics, Y. Jack Kingma, N. Durdle and M.M. Chambers, University of Alberta (85)196

Sensor Performance Evaluation, Paul Lederer, Wilcoxon Research (89)108

Software for Nutrition, Laurie North, N²-Squared Computing (88)136

Speaker-Independent Word Recognition, G.C. Ramos and S.S. Viglione, Interstate Electronics Corp. (88)110

Temperature Measurement With IR, Frank G. Shellock, Stanley A. Rubin and Charles E. Everest, Cedars-Sinai Medical Center (86)81

Text-To-Speech Conversion, David L. Gilblom, Speech Plus, Inc. (86)166

Touch-Screen Digitizer, Steve Sloan, TSD Display Products, Inc. (90)75

Truly "Personal Computers", Michael Toffoli, Medtronic Pacing Systems (87)123

Ultrafast Cine-CT Scanner, Yvonne Howell and Mary V. Wildensten, Imatron Inc. (90)68

Ultrasonic Flowmeter Uses Wide-Beam Transit-Time Technique, Richard G. Burton, Transonic Systems and Ronald C. Gorewit, Cornell University (86)68

User's Needs Vs. Vendor Offerings, Richard Moore, Consulting Editor (85)202

Vacuum Capacitors in Radiation-Free Diagnostic Imaging, Robert W. Hansen, ITT Jennings (90)86

VIDVOX—A Communication Aid for Deaf Persons, Yvonne S. Russell and Don Ruder, Sensory Aids Foundation (88)127

Where's The Thief? Jim Cusson, Lab Systems Inc. (90)65

Arnold, Christine, Management Science America, Inc., Hospital Information System (89)124

Aronson, Milton H. and Larry M. Berger, COBOL Programming, Part 2—Procedure Division (85)92

Aronson, Milton H. and Larry M. Berger, COBOL Programming, Part 3—Sample Program, Data Types (86)60

Aronson, Milton H., COBOL Programming, Part 4—Arithmetic (87)94

Aronson, Milton H., COBOL Programming, Part 5—Report-Type Pic Codes, Relational and Logical Operations, Branching and Condition Test (88)69

Aronson, Milton H., COBOL Programming, Part 6—Analysis of Typical Programs (89)78

Aronson, Milton H., COBOL Programming, Part 7—Comparison of COBOL, BASIC, FORTRAN and PASCAL (90)104

Aronson Milton H., Computer Principles & Practices—A Course For Healthcare Professional, Part 1 (89)69

Aronson, Milton H., Computer Principles and Practice, Part 2—Arithmetic and Logic, The Two Functions of a Computer (90)110

Baker, Ross, Steve Adler and Richard D. Sanders, Intermedics, Advances in Dual-Chamber Pacing, Sensing and Telemetry (88)76

Barclay, Richard, Ph.D., Deaconess Hospital and Joseph O'Keefe, Transtector Systems, Downtime: What is the Real Cost? (87)99

Barrett, John P. Jr., M.D., Florida Center for Knee Surgery, Computer Use in a Surgery Center (88)123

Becker, Robin D. and Ronald J. Flower, Catalyst Research, Medical Instrument Reliability—Designing Reliable Microprocessors Based Monitoring Instruments (89)103

Berger, Larry M. and Milton H. Aronson, COBOL Programming, Part 2—Procedure Division (85)92

Berger, Larry M. and Milton H. Aronson, COBOL Programming, Part 3—Sample Program, Data Types (86)60

Boehringer, John R., Boehringer Laboratories, Computerized Spirometer (85)200

Brabyn, Dr. John, Smith-Kettlewell Institute of Visual Sciences, Rehabilitation Engineering for the Blind (88)102

AUTHORS

Adler, Steve, Ross Baker and Richard D. Sanders, Intermedics, Advances in Dual-Chamber Pacing, Sensing and Telemetry (88)76

Aforisomo, John F., R.Ph., PhaR_mex®, Div of Automatic Business Products Co., Inc., Computer Software—Database Can Select the Right Drug, for the Right Patient, at the Right Time (88)119

Anbar, Dr. Michael, State University of New York, Reflections on the University/ Industry Partnership (88)106

- Burton, Richard G., Transonic Systems and Ronald C. Gorewit, Cornell University, Ultrasonic Flowmeter Uses Wide-Beam Transit-Time Technique (86)68
- Cardwell, Susan, Hewlett-Packard, Local Area Network for the ICU (87)114
- Chambers, M.M., Y. Jack Kingma and N. Durdle, University of Alberta, Robotic Device For Feeding Quadriplegics (85)196
- Cohn, James, Sigmund Cohn Corp., Medical Uses of High-Tensile-Strength Platinum Alloy Wire (88)96
- Corson, Dr. John A., Dartmouth Medical School, and Harold K. Myers, Royal Victoria Hospital, Biofeedback: State-of-the-Art—Problems And Possibilities (89)93
- Cusson, Jim, Lab Systems Inc., Where's The Thief? (90)65
- Davis, Andrew, Data Translation, Blood-Pressure Data Acquisition, Computer and A/D Converter Provide Rapid Blood-Pressure Data (87)126
- de Bruin, Frank, Oldelft Corp. of America, Image Intensifier Photography (86)78
- deRosa, Richard A., Diagnostic Medical Instruments, Dual-Channel Confusion (88)92
- Devoid, Allen, Bio-Tek Instruments, Blood Pressure Measurement—Sensitivity Error Associated With Use of Disposable Diaphragm Domes in Direct Blood Pressure Measurements (86)74
- Dickerhofe, Bruce, Copley Memorial Hospital, Pharmacy Computer System (89)120
- Durdle, N., Y. Jack Kingma and M.M. Chambers, University of Alberta, Robotic Device For Feeding Quadriplegics (85)196
- Dygert, Peter J., Eastman Kodak, DRG and Lab Costs (88)100
- Everest, Charles E., Frank G. Shellock and Stanley A. Rubin, Cedars-Sinai Medical Center, Temperature Measurement With IR (86)81
- Feinschreiber, Robert, Attorney, Deducting Bad Debts Before They Happen (85)132
- Fitzgerald, Peter J., Ingela Schnittger, Elaine P. Gordon and Richard L. Popp, Stanford University School of Medicine, Cardiac Measurement (87)102
- Flower, Ronald J. and Robin D. Becker, Catalyst Research, Medical Instrument Reliability—Designing Reliable Microprocessors Based Monitoring Instruments (89)103
- Gardner, Reed M., University of Utah, Computers in the ICU (87)129
- Gilblom, David L., Speech Plus, Inc., Text-To-Speech Conversion (86)166
- Gordon, Elaine P., Ingela Schnittger, Peter J. Fitzgerald and Richard L. Popp, Stanford University School of Medicine, Cardiac Measurement (87)102
- Gorewit, Ronald C., Cornell University and Richard G. Burton, Transonic Systems, Ultrasonic Flowmeter Uses Wide-Beam Transit-Time Technique (86)68
- Hansen, Robert W., ITT Jennings, Vacuum Capacitors in Radiation-Free Diagnostic Imaging (90)86
- Hausner, Karl, ELMED Inc., Electrosurgery and Patient Monitoring (85)110
- Hayes, Melinda, Datamax Computer Corp., Computer Anxiety? (87)136
- Howell, Yvonne and Mary V. Wildensten, Imatron Inc., Ultrafast Cine-CT Scanner (90)68
- Jafek, Beverly J., Gould/De Anza Imaging, Brain Imaging With QAR & PET (85)114
- Kankoski, Thomas S., Eastman Kodak Co., Automated Clinical Laboratory Equipment for Neonatal and Pediatric Use (90)76
- Keller, Wynne, Downeast Digital, Microcomputers in the Laboratory (87)137
- Kemp, David, Sola Electric, Power Supplies—Voltage Regulator or Dedicated Line? (89)98
- Kingma, Y. Jack, N. Durdle and M.M. Chambers, University of Alberta, Robotic Device For Feeding Quadriplegics (85)196
- Koszuta John, Boeheim Products, Hemodynamic Trend Plotter (86)158
- Lederer, Paul, Wilcoxon Research, Sensor Performance Evaluation (89)108
- Legatti, Raymond and Raymond Wood, Technology Research Corp., GFCI—Ground Fault Circuit Interrupter (90)79
- Leifer, Larry, Stanford University, Rehabilitative Robotics (88)85
- Mager, Gary, Sola Electric, Hospital Power Problems—Tennessee Hospital Diagnoses Power Line Fluctuations, Cures CAT Scanner Computer Ills With Voltage Regulator (90)97
- Marran, Dr. Vincent P., N-Squared Computing, Computers as Nutritional Consultants (89)126
- Meivers, Michael R., ASF Company, Pumps in Medical Instruments (87)106
- Morsch Stokesberry, Nancy, Brownstone Associates, Computer Facilitates Pharmaceutical Testing (88)116
- Moore, Richard, Consulting Editor, User's Needs Vs. Vendor Offerings (85)202
- Morse, H. Newcomb, Instrument Manufacturer is Sued for Not Proving Adequate Warnings of Instrument Limitations (90)16
- Morse, H. Newcomb, Is Physician Responsible For Idiosyncrasy of Machine? (86)21
- Morse, H. Newcomb, Was Failure Due to Design or Installation? (87)20
- Morse, H. Newcomb, What is Reasonable Care in Design? (89)20
- Morse, H. Newcomb, When is an Apparatus Inherently Dangerous? (85)16
- Morse, H. Newcomb, When Must Negligence Be Proved? (88)6
- Myers, Harold K., Royal Victoria Hospital, and Dr. John A. Corson, Dartmouth, Biofeedback: State-of-the-Art—Problems and Possibilities (89)93
- Nelson, John, Eagle Computer, Inc., Group Practice Computer: OMEGA—On-Line Medical Executor for Group Automation (90)80
- North, Laurie, N²-Squared Computing, Software for Nutrition (88)136
- Odell, Roger C., Valleylab, Electrosurgery With REM, (85)107
- O'Keefe, Joseph, Transtector Systems and Richard Barclay, Ph.D., Deaconess Hospital, Downtime: What is the Real Cost? (87)99
- Popp, Richard L., Ingela Schnittger, Elaine P. Gordon, and Peter J. Fitzgerald, Stanford University School of Medicine, Cardiac Measurement (87)102
- Pritchett, James, Trinity Computing, Cardionet—The Local Area Network for the Cardiology Department (87)118
- Ramos, G.C. and S.S. Viglione, Interstate Electronics Corp., Speaker-Independent Word Recognition (88)110
- Rubin, Stanley A., Frank G. Shellock and Charles E. Everest, Cedars-Sinai Medical Center, Temperature Measurement With IR (86)81
- Ruder, Don and Yvonne S. Russell, Sensory Aids Foundation, VIDVOX—A

1984 ANNUAL INDEX *Continued*

- Communication Aid for Deaf Persons (88)127
- Russell, Yvonne S. and Don Ruder, Sensory Aids Foundation, VIDVOX—A Communication Aid for Deaf Persons (88)127
- Sanders, Richard D., Ross Baker and Steve Adler, Intermedics, Advances in Dual-Chamber Pacing, Sensing and Telemetry (88)76
- Schnittger, Ingela, Elaine P. Gordon, Peter J. Fitzgerald and Richard Popp, Stanford University School of Medicine, Cardiac Measurement (87)102
- Seaman, William B., Columbia University, Digital Radiography (86)156
- Shellock, Frank G., Stanley A. Rubin and Charles E. Everest, Cedars-Sinai Medical Center, Temperature Measurement With IR (86)81
- Sloan, Steven, TSD Display Products, Inc., Touch-Screen Digitizer (90)75
- Smith, Jacqueline, William Beaumont Hospital, Computer Program for Cognitive Rehabilitation (90)94
- Smith, J. Craig, Oxford Medilog, Inc., Motion Analysis (87)110
- Stieglitz, Mark, Western Digital, Local Area Networks (90)89
- Sun, Tsieh, M.D., North Shore University Hospital, Electrophoresis, Part 1 (85)85
- Sun, Tsieh, M.D., North Shore University Hospital, Electrophoresis, Part 2—Separation of Protein Fractions (86)54
- Sun, Tsieh, M.D., North Shore University Hospital, Electrophoresis, Part 3—Immunoelectrophoresis and Immunodiffusion Techniques (87)86
- Sun, Tsieh, North Shore University Hospital, Electrophoresis, Part 4—Lipoprotein Electrophoresis (89)86
- Tegen, Amelia, Oscilloscope Div., Nicolet Instrument Corp., Digital Oscilloscopes (85)127
- Toffoli, Michael, Medtronic Pacing Systems, Truly "Personal Computers" (87)123
- Viglione, S.S. and G.C. Ramos, Interstate Electronics Corp., Speaker-Independent Word Recognition (88)110
- Wildensten, Mary V. and Yvonne Howell, Imatron Inc., Ultrafast Cine-CT Scanner (90)68
- Wilson, Anita K., University-Stout, Nutrition Analysis Programs (88)132
- Wood, Raymond and Raymond Legatti, Technology Research Corp., GFCI—Ground Fault Circuit Interrupter (90)79

BUYERS GUIDE

- Balances and Microbalances (88)147
- Biofeedback (89)158
- Blood Cell Counters (88)152
- Blood Chemistry (88)155
- Blood Coagulation (88)161
- Blood Flowmeters (86)88
- Blood Gas (88)166
- Blood pH (88)172
- Blood Pressure Instruments (86)93
- Cardiac Output Meters (86)105
- CAT Scanners (90)117
- Catheters and Catheterization Systems (89)164
- Chromatography (85)137
- Computer Hardware—Modems (86)172
- Computer Hardware—Printers (85)204
- Computer Software—Patient Care (85)218
- Computer Software—Patient Management (86)181
- Computer Software—Pharmaceutical/Materials Management (88)139
- Coulometric Titrators (85)149
- ECG Analyzers (88)176
- ECG-EEG-EMG-ENG (86)108
- ECG Transmitters/Receivers (87)168
- Electrical Safety & Test Equipment (90)122
- Electrodes for ECG, EEG, EMG, ENG (89)170
- Electronic Thermometers (87)172
- Electrophoresis (85)150
- Electrosurgery Equipment (85)157
- Financial Management (90)131
- Hardware—Turnkey Systems (89)141
- Heart Rate Meters (88)184
- Hematocrit (88)190
- Holter ECG (85)162
- Iontophoresis (85)174
- Magnetic Resonance (88)191
- Market Analysis (85)136, (86)87, (87)167, (88)146, (89)157, (90)116
- Neonatal & Pediatric Equipment (90)150
- Osmometers (85)176
- Pacemakers (86)127
- Patient Monitors (89)181
- Patient Scales (87)178
- Pulmonary/Respiratory Equipment (90)161

- Pumps, Infusion & Autotransfusion Devices (87)181
- Radiation Detection/Radiology (85)178
- Recorders (88)195
- Refractometers (85)191
- Scanners, Imaging and Accessories (86)136
- Simulators (90)178
- Software—Databases (89)128
- Software—Diagnostics (89)135
- Stimulators, Defibrillators (89)196
- Stress Test Systems/Ergometers (90)184
- Transient/Surge Protectors (87)190
- Ultrasonics (87)200

THE LAW and MEDICAL ELECTRONICS

- Instrument Manufacturer is Sued for Not Proving Adequate Warnings of Instrument Limitations, H. Newcomb Morse (90)16
- Is Physician Responsible for Idiosyncrasy of Machine? H. Newcomb Morse (86)21
- Was Failure Due to Design or Installation? H. Newcomb Morse (87)20
- What is Responsible Care in Design? H. Newcomb Morse (89)20
- When is an Apparatus Inherently Dangerous? H. Newcomb Morse (85)16
- When Must Negligence Be Proved? H. Newcomb Morse (88)6

MISCELLANEOUS

- Annual Index 1983 (85)226
- Book News (85)106; (87)85; (88)114; (89)102; (90)160
- Calendar of Events (85)131; (86)80; (87)165; (88)122; (89)118; (90)103
- Industry News (85)126; (86)53; (87)164; (88)118; (89)204; (90)102
- Market Analysis: (85)136; (86)87; (87)167; (88)146; (89)157; (90)116
- Medical Safety Newsletter (85)134; (86)84; (87)162; (88)112; (89)116
- Show Highlights: ACC/AAMI (85)42; AHRA (87)30; Computers In Health Caresm (87)40; AIUM (88)61; AHA (89)22; RSNA (89)34; SCAMC (89)43

